Canada: Airport Security



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Summary

The Canadian airport security market is a growing market that is highly receptive to new products and technologies required for the protection of airports across Canada. According to Transport Canada's recent reports, air passenger traffic is expected to grow 4.3 percent annually through 2013. This growth will generate the need for increased airport capacity through new construction and upgrades of passenger terminals. As a result, more advanced security products will be required as innovative methods of searching passengers, cargo and personnel will be implemented in Canada's major airports. This represents good opportunities for U.S. manufacturers of airport security equipment.

For the purpose of this report, airport security equipment has been segmented into the following subsectors: personnel, baggage and cargo scanners and access control systems. Given the sensitive nature of airport scanning and screening security equipment installations, exact numbers for this sector are hard to establish. However, industry sources have reported that this category is estimated to grow two to three percent through 2013. This growth is mainly attributed to airport expansion projects scheduled in the coming years due to the increase in passenger traffic.

The total market demand in Canada for airport security access control equipment in 2009 is estimated at \$516 million, with an expected growth rate of five to six percent for 2010. Imports fulfill approximately seventy-seven percent of this demand amounting to \$398 million. It is estimated that U.S. companies will supply approximately fifty-three percent of these imports in 2009. While all the major manufacturers of airport security access control equipment are present in the Canadian market, excellent opportunities exist for small and medium-sized companies offering innovative niche products or add-on components.

Growth in the Canadian airport security market will continue to be in electronic physical access control systems, especially using biometrics, SMART cards and contactless technology, which can also be used to secure data system access. Airport authorities are constantly searching for innovative methods of searching passengers and cargo.

The largest purchaser of airport security equipment is the <u>Canadian Air Transport Security Authority</u> (CATSA). CATSA is responsible for screening passengers and cargo. They announce airport security equipment procurements through <u>MERX</u>, the government electronic tendering system or through a list of pre-approved manufacturers and installers. U.S. companies looking to penetrate the Canadian airport security market should consider subscribing to MERX as well as working with pre-approved local installers of airport security equipment.

Market Demand

Canada operates 1,369 airports. There are twenty-seven airports in Canada which are designated as National Airport Systems or NAS airports. To receive this designation, the airport must be located in a national, provincial or territorial capital, or have a count of 200,000 passengers a year or more. Canada's largest airports by passenger traffic per year are:

- a) Lester B. Pearson Airport in Toronto, Ontario with approximately thirty-two million passengers;
- b) **Vancouver International Airport**, in Vancouver, British Columbia with approximately eighteen million passengers; and
- c) Pierre Elliott Trudeau International Airport, in Montreal, Quebec with approximately thirteen million passengers

<u>Transport Canada</u> has predicted air passenger traffic to have an annual average growth rate of 4.3 per cent through 2013. The following chart reflects Canada's ten largest airports and their passenger traffic.

Canada's Ten Largest Airports By Passenger Traffic in 2008					
		Total	Annual		
Rank	Airport	Passengers	Growth		
1	Toronto Pearson International Airport	32,334,831	9.00%		
2	Vancouver International Airport	17,852,459	5.30%		
_	Montréal-Pierre Elliott Trudeau International				
3	Airport	12,813,199	4.10%		
4	Calgary International Airport	12,506,893	5.20%		
5	Edmonton International Airport	6,437,334	10.70%		
6	Ottawa Macdonald-Cartier International Airport	4,339,225	9.00%		
7	Halifax Stanfield International Airport	3,578,931	6.90%		
	Winnipeg James Armstrong Richardson				
8	International Airport	3,570,033	0.40%		
9	Victoria International Airport	1,538,417	6.90%		
10	Kelowna International Airport	1,389,883	4.70%		

In May 2009, the Government of Canada announced that it would invest \$355.8 million supporting CATSA's security projects. These initiatives include the investment in technologies such as biometric identification technology, mobile screening equipment, multi-view x-ray units and new screening lanes.

As a result of this funding, Canada's major airports will soon have new x-ray scanning gear for carry-on baggage that will decrease waiting time at security checkpoints. This equipment will be in airports by February 2010 and systems will be installed throughout the year in Vancouver, Edmonton, Toronto, Montreal and Halifax.

Market Data

Airport security equipment is divided into two sub-sectors: personnel, baggage and cargo scanners and access control systems .For the purpose of this report access control includes security equipment such as SMART cards, keypads, Radio-frequency identification (RFID) cards, Closed-circuit television (CCTV), mirrors and other security equipment. Scanning and screening equipment is required to screen passengers before being boarded onto the plane through metal detectors and other screening equipment. Cargo screening involves x-rays, ion scanners and z-ray backscatter equipment.

Access Control

Access control is extremely important in airports and is enforced strictly with the help of technology and equipment such as SMART cards, padlocks, still image video cameras and other video camera recorders, lenses, prisms, mirrors and other mounted optical elements. Access control also requires equipment such as fencing and barbed wire to prevent unauthorized access to areas such as tarmacs and runways.

The following table provides an overview of the estimated size and growth trends for the Canadian market for access control security equipment, including the HS Codes.

Canadian Airport Security Market for Access Control Equipment (US\$ Millions)

	2007	2008	2009 (projected)
Canadian Imports	367	359	398
Local Production	493	419	414
Canadian Exports	394	323	296
Total Market	465	455	516
U.S. Imports	191	178	209
Exchange Rate	1.075	1.218	1.218
Inflation Rate	2.20	2.60	2.00

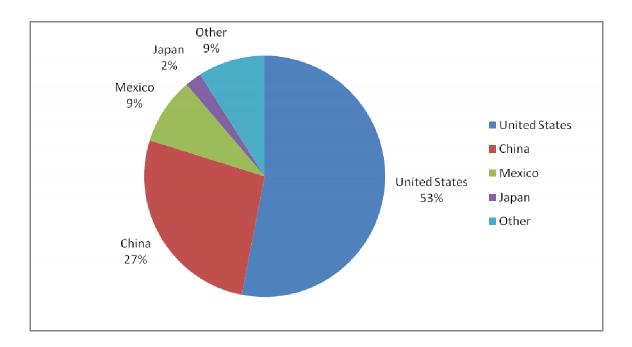
- HS 7313 BARBED WIRE
- HS 854381 ELECTRICAL PROXIMITY CARDS AND TAGS
- HS 851230 ELECTRICAL SOUND SIGNALING EQUIPMENT
- HS 853110 BURGLAR OR FIRE ALARMS
- HS 854212 SMART CARDS
- HS 852460 CARDS INCORPORATING A MAGNETIC STRIPE
- HS 854210 SMART CARDS WITH INTEGRATED CIRCUITS
- HS 853190 ELECTRIC SOUND/VISUAL SIGNALING APPARATUS
 PARTS

- HS 7314 FENCING
- HS 700719 TOUGHENED SAFETY GLASS
- HS 700729 LAMINATED SAFETY GLASS
- HS 830110 PADLOCKS
- HS 852540 -CAMERAS/VIDEO CAMERAS
- HS 852530 TELEVISION CAMERAS
- HS 900290 LENSES, PRISMS, MIRRORS

While domestic production of security equipment in Canada has remained steady from 2003 to present, industry estimates reveal that the proportion of Canadian production in the total market will in all probability decrease over the next few years since Canadian producers tend to primarily target foreign markets. This has allowed U.S. firms and other foreign producers to control approximately seventy-nine percent of the Canadian security market.

The access control market in Canada has a strong presence of equipment manufactured and imported from the United States. The United States has a reputation for innovation and quality in the high-tech field and Canadian firms look south for much of their security equipment needs. The estimated total market for access control equipment in 2009 is \$516 million. Approximately 53 percent of all imports come from the United States and U.S. firms have a strong reputation in Canada. This market shows strong growth and opportunity with new Canadian government programs fueling the increased demand for airport security equipment.

The United States is internationally respected for its advances in security technology and equipment. The United State's leadership in security technology as well as its geographic proximity enables the United States to be the largest exporter of airport security equipment to Canada. China is also a significant source of imports to Canada as well but is not as highly regarded for their quality and innovation as are U.S. firms. The following chart demonstrates the leaders of imports of airport security access control equipment.



Scanning and Screening Equipment

Security and screening personnel use equipment such as metal detectors and millimeter wave equipment to search passengers, while x-ray equipment is used to screen both passenger baggage and cargo. Equipment such as radiation scanners and optical character recognition equipment are used to secure larger commercial type cargo. Canada Border Services Agency (CBSA) is responsible for cargo security. CBSA is charged with controlling the flow of goods across the border. CBSA uses x-ray machines, z-ray backscatter scanners and explosive or drug identifying equipment.

For purpose of this report, market data collected and analyzed for the overview of this sub-sector within the airport security market in Canada may not be exhaustive due to the sensitive nature of security equipment installations. Specific information on the size of the airport security market for screening equipment is not freely available, as the airport operators and the government are hesitant to reveal much information about their security arrangements.

Best Prospects

The increasing need to secure airport facilities creates opportunities for U.S. manufacturers of airport security equipment. The growth in this broad industry will be concentrated into two main categories: access control and biometrics. Growth in the Canadian airport security market will continue to be in electronic physical access control systems, especially systems that use biometrics, SMART cards and contactless technology. Access to restricted areas and information will require upgrading and improvements as technology advances.

Key Suppliers

There are three major Canadian manufacturers of access control equipment, Kantech (part of the Tyco Group), Keyscan and Verex (a subsidiary of Chubb Security). Other major players include Digital Security Controls (part of Tyco Fire & Security), and Paradox Security Systems. All these companies ship their products worldwide. In addition, companies such as Acsys Biometrics, Diaphonics and Bioscrypt are

examples of the numerous small and new Canadian firms that are emerging, primarily in Ontario, with innovative access control technologies, especially in the field of biometrics.

The domestic production of airport security equipment such as; access control systems, x-ray, metal detectors and biometrics is relatively small and concentrated in the provinces of Ontario and Quebec. The locally manufactured products are high-quality and customized to the client's requirements. As a result, Canadian-made airport security products' technological sophistication and price ranges are limited, which creates opportunities for U.S. firms.

Scanning and screening equipment such as x-ray scanners, complete baggage screening, metal detectors and other equipment are provided by large established firms as described below.

<u>L-3 Communications</u> supplies many different types of security equipment including a range of x-ray systems, millimeter wave scanners, explosive trace detection and cargo screening systems. L-3 provides whole baggage screening equipment with life cycles of seven to ten years.

<u>Garrett Metal Detectors</u> has a complete line of walk-through and wand metal detectors supplying the airports in Canada.

<u>GE Infrastructure Security</u> has operations in more than 30 countries and its range of equipment includes some of the best-known brand names for intrusion and fire detection. Access and building control, cideo surveillance, explosive and drug detection.

<u>Identix & Viisage</u> provides fingerprint, facial and skin biometric technologies, as well as systems and critical system components that empower the identification of individuals in large-scale ID and ID management programs.

<u>NEC Group</u>, headquartered in Japan, is a leading global manufacturer and service provider of telecommunications, computer and electronic devices.

<u>Rapiscan</u> is a manufacturer that markets security inspection systems worldwide to end-users. It is a wholly owned subsidiary of OSI Systems.

<u>Smiths Industries</u> uses advanced technologies to deliver comprehensive security solutions based on the detection and identification of explosives, chemical and biological agents and other toxic chemicals to providing x-ray screening and metal detection systems.

Prospective Buyers

CATSA

CATSA was created in 2002 as a Crown corporation (government owned) and is based in Ottawa within the National Capital Region. It reports to Parliament through the Minister of Transport. CATSA is responsible for many operations within airport security, but their primary responsibility lies with screening passengers. Their responsibilities are:

- Pre-board screening of passengers and their belongings;
- Acquisition, deployment, operation and maintenance of explosives detection systems at airports;
- Implementation of a restricted area identification card;
- The screening of non-passengers entering airport restricted areas.

CATSA is responsible for the purchase of all security equipment used in airports. They are the security authority and purchase the equipment used to create a safe environment at all airports across Canada.

CATSA screens all passengers in the airport and cargo and must also secure its employees and restrict access in these areas. It has a procurement process for all security equipment used in airports and all products must be qualified and standardized.

Canada Border Services Agency (CBSA)

CBSA is the Canadian customs agency that handles all passage of goods and people across Canada's international borders. The agency is responsible for providing integrated border services that support national security and public safety priorities and facilitate the flow of persons and goods, including animals and plants that meet all requirements under program legislation. The President of the CBSA reports directly to the Minister of Public Safety Canada and controls and manages all matters relating to the Agency.

CBSA has a presence at any airport which involves international flights to secure the border from the import/export of illegal or restricted goods. The CBSA requires some of its own security equipment to search cargo and passengers. These include x-ray machines, ion scanners and other equipment used to search cargo and personnel. The CBSA does concentrate on passenger screening equipment for the control of immigration and illegal entry and as such requires equipment to examine biometric passports. All other security screening is done by CATSA. CBSA also screens cargo for illegal and restricted goods with x-ray, z-ray backscatter and other scanning equipment.

The Government of Canada (GoC) will be interested in purchasing specific types of airport security equipment such as biometric readers as they introduce security measures such as biometrics in passports. These purchases will be made through CBSA, as this is the authority that regulates cross border traffic. This introduction is in its early integration stage and will be accelerate in the near future, due to its mandatory biometric passport legislation; that states that all visitors to Canada will require biometric passports by 2013.

Market Entry

Scanning and Screening Equipment

CATSA is responsible for the procurement of all scanning and screening equipment that will be used in NAS airports. CATSA will issue tenders for required equipment and services on the government electronic tendering service, MERX. MERX is the GoC's on-line system that advertises government contracting opportunities to potential bidders. CATSA lists current tenders on the MERX and companies who subscribe to MERX can submit bids to secure sales.

U.S. suppliers are eligible to bid on any contract covered under the North American Free Trade Agreement (NAFTA) or the World Trade Organization Agreement on Government Procurement (WTO-AGP) provided all qualification requirements are met. These requirements include an assessment of the company's financial, technical and managerial skills to ensure that they are able to fulfill the contract. There is no cost to subscribe to MERX's Basic Tenders package to access the federal government opportunities.

The Basic Tenders Subscription package includes the following features and benefits:

- Access to all Open Opportunity Notices of Canadian public-sector buying organizations
- Access to all Former Opportunities and Award Notices of Canadian public-sector buying organizations
- Access to International Opportunities and Government Business Opportunities
- · Access to Government of Canada tender documents only.
- Access to the Document Request List (GoC Opportunities only)

- Unlimited preview and download of GoC tender documents
- Free Notification of Amendments
- One free Opportunity Matching profile
- Free delivery of Opportunity Matching results (email, fax or online)

For additional information on the MERX system, please consult their website or call 1-800-964-6379.

Products must be qualified and meet CATSA's standards before they can be distributed to the airports through CATSA. As CATSA is responsible for all airport security throughout the country it holds great responsibility for the success of a product in the airport security market. If a product meets CATSA's approval, companies are able to sell their products to all airports throughout Canada.

It is important for all U.S. airport security suppliers to familiarize themselves with the rigorous testing procedures that their products may be liable to meet. In some cases, first tier suppliers may suggest that the products are tested before including them in their security solutions package.

Given the technical nature of many products and the service and support required, companies that are seeking to break into the Canadian market may want to consider working with a local security equipment installer that sells into the airport security market.

Access Control

Access control suppliers do not do business directly with Canadian airports. To gain admission to the Canadian airport access control market, U.S. suppliers must go through a Canadian security equipment installer. An installer represents a group of companies that can provide the equipment needed to complete a requirement. The installers then mount the equipment in the airports.

Security equipment installers with access control equipment are listed below.

<u>Protectron</u> - Incorporated in 1988 and headquartered in Montreal, Quebec, Reliance Protectron Security Services is one of Canada's largest security monitoring and installation companies. Protectron provides equipment and services from general surveillance to recording individuals' biometric features, from the simple fixed camera to a complete system with multiple cameras and digital recorders.

<u>Microtec</u> – A division of First National AlarmCap LP, a Canadian Income Fund. Microtec is the largest security alarm company that is wholly Canadian owned and third largest in the industry in Canada. They currently operate two monitoring stations within Canada serving both French and English clientele in their language of choice.

<u>CHUBB Security</u> - Headquartered in Mississauga, Ontario, installs security equipment for intrusion detection alarm systems (burglar alarms), access control/card access, video surveillance (CCTV, digital video recording), photo identification and panic attack/hold up systems. Innovative technologies addressing biometrics, video analytics, smart cards and database synchronization are available to supplement normal security standards for enhanced defense in critical areas.

<u>Frisco Bay</u> - A Canadian provider of security integration services and a subsidiary of Stanley CSS. Stanley CSS designs, installs, monitors and services security systems for industrial, government, commercial, residential and national account customers.

<u>Simplex Grinnel</u> - Headquartered in Boca Raton, Florida, SimplexGrinnell provides systems integrator for designing, commissioning and maintaining large Windows®-based security solution, as well as fire suppression, integrated security applications linking access control, CCTV and fire protection.

Market Issues and Obstacles

Canada does not have a comprehensive regulatory scheme for safety and security products. Importers of security products must obtain certification from <u>Underwriter's Laboratories of Canada (ULC)</u>, the Canadian Standards Association (CSA), Industry Canada, and/or Factory Mutual Engineers (FM).

However, after eight years of development, Underwriters' Laboratories of Canada (ULC) announced in November 2005 the First Edition of CAN/ULC-S319-05, Electronic Access Control Systems. This standard was approved by the ULC Committee on Security and Burglar Alarm Equipment and Systems dated September 2005. The standard sets new requirements for the construction, performance and operation of access control systems, and provides Canadian security manufacturers, integrators and end users with the parameters and guidelines they need to design, install and implement reliable and sustainable access control systems. ULC S319 sets out a modular approach, based on government and private sector needs, rather than technology that can ensure availability of reliable cost-effective equipment. Although ULC S319 does not include installation standards that are expected to be published at a later date - it does help security installers and integrators in several ways.

ULC also conducts performance tests and issues approval for newly introduced access control systems. Additionally, like the Canadian Standards Association (CSA), it also tests and certifies a wide range of electrical equipment and appliances, and serves as a source of information for U.S. companies that want to register their products for retail in Canada. CSA electrical certification is mandatory for wired systems or battery-operated equipment that operates on more than 30 volts. CSA also tests access control systems for power hazards, as this is a requirement for all electrical and electronic products, which operate within certain radio frequency bands. U.S. companies should therefore examine closely which testing certification their products need and which testing agency best meets their needs.

To maximize market penetration and to comply with Quebec's language laws, instructions, warranties and packaging accompanying access control products sold in Canada should be labeled and accompanied by operational instructions in both of Canada's official languages, English and French. If the Quebec rules are followed, companies will meet all the bilingual rules that may be applicable for sales in the other provinces. The Office of the French Language (Office Quebecois de la langue française) has for further details on language requirements. Exporters are encouraged to work with a local distributor or major retailer to meet these requirements and ensure proper French-Canadian language usage. No customs duties or tariffs are levied on qualified U.S.-made smart card systems entering Canada. The Canadian Goods and Services tax (GST) of 5 percent on a value-added basis is assessed by Revenue Canada at the time of import, and at each subsequent resale level. Importers are entitled to partially offset their GST payments by collecting and retaining GST payments received from their customers.

Trade Events

- CANASA Security Canada Central October 20-21, 2010 Toronto, Canada Toronto Congress Centre http://www.securitycanadaexpo.org
- Cardware 2010: Payment Insights
 June 22-23, 2010
 Niagara Falls, Ontario, Canada
 http://www.actcda.com/calendar/shows.htm

Resources and Key Contacts

Canadian Security Association (CANASA) http://www.canasa.org

Advanced Card Technology Canada www.actcda.com

Canadian Security Magazine www.canadiansecuritymag.com

Canadian Air Transport Security Authority www.catsa-acsta.gc.ca

Canadian Public Tenders www.merx.com

Canadian Airport Council www.cacairports.ca/english/

For More Information

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